## 810009866/DB | C-004-DA-8W-M04BK/28G/GY



Fiber indoor/outdoor cable, 4 Fiber, Single Jacket Armor, LSZH, Gel-Filled, Central Loose Tube Cable, Singlemode G.652.D, Meters jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-DA

## General Specifications

Armor Type Corrugated steel

Cable Type Central loose tube

Construction TypeArmoredSubunit TypeGel-filledJacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB F.O. CABLE 810009866/DB CSA GEL LOOSE TUBE 4x9

/125 OS2 ULSZH (Serial NUMBER) (METRE MARK)

Subunit, quantity 1
Fibers per Subunit, quantity 4
Total Fiber Count 4

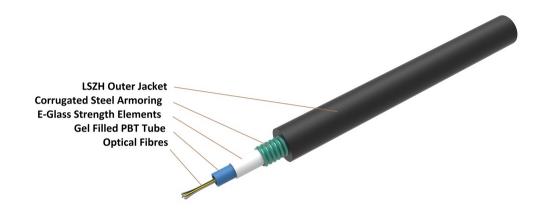
#### Dimensions

Buffer Tube/Subunit Diameter2.8 mm0.11 inDiameter Over Jacket10 mm0.394 in

### Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded330 mm | 12.992 inMinimum Bend Radius, unloaded210 mm | 8.268 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1250 N | 281.011 lbf

**Compression** 30 N/mm | 171.304 lb/in

**Compression Test Method** IEC 60794-1 E3

**Impact** 5 N-m | 44.254 in lb

Impact Test Method IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method IEC 60794-1 E1

**Twist** 5 cycles

Twist Test Method IEC 60794-1 E7

**Optical Specifications** 

Fiber Type G.652.D | OS2

## **Environmental Specifications**

**Operating Temperature**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

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Storage Temperature -40 °C to +70 °C (-40 °F to +158 °F)

**Cable Qualification Standards** EN 187105 | IEC 60794-1-2

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

Flame Test Method | IEC 60332-1 | IEC 60754-1 | IEC 60754-2 | IEC 61034-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

#### **Environmental Test Specifications**

**Low High Bend Test Method** IEC 60794-1 E11

**Temperature Cycle**  $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F}\right)$ 

**Temperature Cycle Test Method** IEC 60794-1 F1

Packaging and Weights

**Cable weight** 135 kg/km | 90.716 lb/kft

#### Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber 8W-250um

#### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



# CS-8W-250-EMEA | 8W-250um

#### LightScope® ZWP Singlemode Fiber



#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.7 µm Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** 249 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±13 μm **Coating Diameter Tolerance (Uncolored)** ±7 μm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum 0.5 µm

Proof Tensile Stress 100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.75 dB @ 1,550 nm
 | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 | 1.00 dB @ 1,625 nm

 Macrobending, 60 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 



## CS-8W-250-EMEA | 8W-250um

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 dB

**Zero Dispersion Slope, maximum** 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.20 dB/km @ 1,550 nm | 0.23 dB/km @ 1,625

nm | 0.344 dB/km @ 1310 nm | 0.344 dB/km @ 1380

- 1385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm | 22 ps(nm-km) at 1625

nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310

nm

**Index of Refraction** 1.467 @ 1,310 nm | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

 $\textbf{Mode Field Diameter} \hspace{15mm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.25mm} | \hspace{0.25mm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$ 

**Mode Field Diameter Tolerance**  $\pm 0.4 \,\mu\text{m}$  @ 1310 nm |  $\pm 0.5 \,\mu\text{m}$  @ 1550 nm

**Polarization Mode Dispersion Link Design Value, maximum** 0.05 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

### **Environmental Specifications**

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

#### \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**Temperature Humidity Cycling, maximum** Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

